REMARKS/ARGUMENTS

Reconsideration and allowance of this subject application are respectfully requested.

Applicants note with appreciation the allowance of claim 16 and the indication of allowable subject matter in claims 2, 8 and 9. For reasons set forth below, it is believed that all claims should be allowed.

Claims 1, 3-7, 10-15 and 17-25 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,353,593 to Chen et al. This rejection is respectfully traversed.

In order to establish that a claim is anticipated, the Examiner must point out where each and every limitation of the claim is found in a single prior art reference. *Scripps Clinic & Resource Found. v. Genentech. Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible Inc.*, 793 F2d. 1565 (Fed. Cir. 1986). The Chen reference fails to satisfy these rigorous requirements.

Chen describes a protection architecture for virtual channel connections (VCCs) in a telecommunications network. Virtual channel connections are bundled together into a virtual path connection (VPC) that can be protection-switched as a unit in response to a transmission line failure. As a result, only a single "construct" must be protection-switched, and pathway selection is simplified at the termination of the virtual channel

connections. As is evident from Figure 1, the focus in Chen is on the transmission line interconnections between physically separate nodes 26. Each node 36 includes "a network element (NE) capable of communicating traffic in a telecommunications system," column 3, lines 24-26, and each node 36 is connected by way of transmission lines 28:

> "transmission lines 28 each comprise optical fiber, cable, twisted wire, or other suitable wire line or wireless link capable of transporting traffic between two nodes 26."

Column 3, lines 34-37. Source and destination nodes 30 and 34 each include ATM switch fabric 42 that performs address translation for switching labels in the traffic and transmits the traffic in accordance with the translated switching labels. The switching fabric at the source node 30 bridges the virtual path connection 38 onto a working transmission link 44 and a protection transmission link 46 extending across the "protection domain" to the destination node 34.

The present invention is not directed to a protection domain defined between two different nodes such as Chen's source and destination nodes 30 and 34. Rather, the present invention is directed to redundancy protection within a single node. The single node includes multiple switch modules, each module containing multiple boards. The modules communicate with one another via internal links so that the modules that make up the single node act as a single cohesive node unit. It is the reliability of the interconnection links between the several modules in a single node that the present invention addresses. Indeed, if any such interconnection link fails between the module,

the entire node operation is jeopardized. That is why redundant interconnection links between the node's modules are employed.

Internal interconnection links between multiple modules in a single node is simply not addressed in Chen. Focusing on entirely different things, it is not surprising that Chen lacks features recited in each independent claim. For example, claim 1 recites "interlinking first and second switch modules in a common switch node." Claim 5 recites "a module in a switch node operatively linked with a second module in the same switch node." Claim 13 recites a single switch node that comprises "first and second switch modules operatively linked to each other. Similarly, claim 17 recites a switch node that comprises "a first switch module operatively communicating with a second switch module through a set of links." Claim 20 recites a single switch module that comprises "a number N of first links, and a number M of second links, all connecting first and second switch modules." This basic feature of a single switching node that includes at least two separate switch modules that are interlinked by first and second redundant links between the first and second modules is not disclosed by Chen.

In addition, the Examiner confuses the internal protocol layer of independent claim 1, which is confined to the internal operation of a single switch node, with an external protocol of communicating between physically separate nodes using a standard ATM protocol. The "over-riding said destination address with the routing tag identifying only an active one of the first and second links" recited in claim 1 relates to an internal encapsulation of a cell or a packet that performs protection switching within the node

without using the ATM layer. Indeed, the node internal encapsulation of the data packets ensures freedom of the single node to switch any type of data format. The information that the switching node uses to route packets and to perform protection switching within the node is confined to the internal protocol layer. The internal protocol layer is not "visible" to the external signals sent to and from the node.

Claim 5 recites a routing tagger that applies a "node-internal routing tag to the data packets in a stream to direct the stream to only one of the first and second redundant links" contained within the node. Where does Chen describe attaching a "node-internal routing tag" to the data packets for routing the packets between modules contained within the single node?

Regarding the single node switch recited in claim 13, where does Chen disclose a single switch node with first and second switch module where each modules, includes plural "device boards outputting data packets having standard routing tags" and a switch core to "over-write the standard routing tags with modified routing tags?" Those modified routing tags are used by the switch core for routing purposes within that switch node in order to route the data packets via the first and/or second link.

Regarding the single switch node of claim 20 that includes first and second switch modules, where does Chen disclose that each switch module includes a "device-side switch core interface between the device circuit and the switch core to add internal routing tags to the data packets identifying only the N number of currently operable first and second links" coupled with the claimed link-side switch port interface that reads "the

internal routing tags and routes the data packets to the N number of currently operable first and second links?"

The instant claims and the subject matter described in Chen are directed to two entirely different types of communication. Chen is focused on external communications between physically separate nodes. The instant claims are focused on redundant communications between modules in a single switch node. Lacking multiple features recited in the independent claims as described above, the rejection based upon Chen is improper and should be withdrawn.

The application is now in condition for allowance. An early notice to that effect is earnestly solicited.

Respectfully submitted,

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